

REMARKS

Claims 1, 2, 4, 5, 7, 8, 10, 11, 13 – 17, and 20 – 30 are pending.

Rejections Under 35 U.S.C. § 112

Claim 23 has been rejected under 35 U.S.C. § 112, first paragraph, for failing to comply with the enablement description. The rejection is respectfully traversed for the following reasons.

Claim 23 is directed to the process of claim 1 wherein the diol and the carboxylic acid are reacted in the presence of an acid catalyst. The Examiner has asserted that this claim is not enabled because the specification does not “reasonably provide enablement for all catalysts known in the field of chemistry.” The Examiner contends that “any acidic catalyst would not work on the claimed process in the same way” and supports this assertion with two examples.

The first example cited by the Examiner relates to super acidic catalysts disclosed in U.S. Patent No. 3,878, 261 (Gardener) that are “suitable for isomerizing paraffins.” In Gardener, however, the alkane is in the gas phase, which goes over the catalyst. One skilled in the art would recognize that chemistry in the gas phase is very different than chemistry in solution. One skilled in art would recognize that if the catalysts disclosed in Gardener are used in catalytic amounts, they should work in the claimed process in the same way as the acid catalysts described in the specification.

The second example cited by the Examiner relates to a super acid disclosed in March's Advanced Organic Chemistry. The Examiner states that this super acid would most likely “remove hydrogen ions from either of the reactants, the diol and the carboxylic acid, instead of helping them to form the desired monoester product.” In March, however, the super acid is used as a solvent (i.e., the alkane is put directly into the acid). If the super acid disclosed in March was used in a catalytic amount, it should also work in the claimed process in the same way as the acid catalysts described in the specification.

Therefore, the specification enables claim 23 such that one skilled in the art can make and use the claimed invention. Applicants respectfully request that the rejection of claim 23 under 35 U.S.C. § 112, first paragraph, be withdrawn.

Claims 1, 2, 4, 5, 7, 8, 10, 11, 13 – 17, and 20 – 30 have been rejected under 35 U.S.C. § 112, first paragraph, for failing to comply with the written description requirement. The rejection is respectfully traversed for the following reasons.

The Examiner has asserted that the phrases “said process being conducted without a continuous extraction step” and “wherein the process does not comprise a continuous extraction step” in claims 1, 27, and 30 are new matter because these phrases lack “a literal description in the original specification.”

A literal description in the original specification is not required, however. As stated in MPEP § 2163, “[N]ewly added claim limitations must be supported in the specification through express, implicit, or inherent disclosure.” While the original specification does not expressly use the phrases “said process being conducted without a continuous extraction step” and “wherein the process does not comprise a continuous extraction step,” these claim limitations are clearly supported in the specification through implicit disclosure.

The Background section of the original specification discusses shortcomings in the prior art, including the shortcoming that many prior art approaches for transforming diols into monoacetates “require specialized equipment such as continuous extraction apparatuses” (page 2, lines 21 – 25). The Summary section of the original specification goes on to explain that Applicants “recognize that in order for a process [for preparing monoacetates from diols] to be commercially viable, it should eliminate the necessity for specialized equipment [i.e., continuous extraction apparatuses]” and that surprisingly the claimed process “does not require specialized equipment [i.e., continuous extraction apparatuses]” (page 3, lines 1 – 9 and 19 – 24). In view of the foregoing, it is clear that Applicants, at the time the application was filed, had possession of the claimed invention, including the negative limitations.

Furthermore, neither the description of “Preparation of Monoesters” (page 7, line 21, through, page 9, line 13) nor the examples in the original specification discuss using a continuous extraction step. In the examples, Applicants describe using a simple round bottom flask for carrying out the process of the invention. One of ordinary skill in the art would certainly recognize the advantage of using inexpensive simple equipment (i.e., a round bottom flask) rather than specialized continuous extraction equipment. Clearly, the original specification as a whole, including the examples, conveys to a person having ordinary skill in the art that

Applicants had possession of the subject matter (i.e., the negative limitations) in question at the time the present application was filed. The Examiner has not proffered or pointed to any factual evidence to the contrary.

The Examiner has cited *Ex Parte Grasselli*, 231 USPQ 393, for the proposition that “[e]ven a negative limitation requires description.” Applicants agree that even a negative limitation requires description. As discussed above, however, a literal description in the original specification is not required. Negative claim limitations can be supported in the specification through implicit or inherent disclosure. *Grasselli* is limited to a situation where the factual evidence of record supported a conclusion that the negative limitations therein introduced new matter. In contrast, Applicants’ original specification reasonably conveys to one skilled in the relevant art that Applicants, at the time the application was filed, had possession of the claimed negative limitations. The claimed negative limitations, therefore, do not constitute new matter, and Applicants respectfully request that the rejection of claims 1, 2, 4, 5, 7, 8, 10, 11, 13 – 17, and 20 – 30 under 35 U.S.C. § 112, first paragraph, be withdrawn.

The Examiner has also asserted that claim 26 is vague and indefinite because of the term “comprising” in the recitation of “an insect mating disruption product comprising.” The Examiner states that using the term “comprising” would mean that “there were additional components besides the insect mating disruption product.”

Claim 26 is directed to a process which includes the step of forming an insect mating disruption product comprising olefinic monoacetate. The transitional phrase “comprising” is open-ended and does not exclude additional unrecited elements. Therefore, as used herein, the term “comprising” means that there can be additional components in the insect disruption product in addition to the olefinic monoacetate. In other words, the olefinic monoacetate is essential, but other components may be added and still form a construct within the scope of the claim. The scope of the claimed subject matter can easily be determined by one having ordinary skill in the art. Claim 26 is therefore not vague and indefinite, and Applicants respectfully request that the rejection of claim 26 under 35 U.S.C. § 112, second paragraph, be withdrawn.

Rejections Under 35 U.S.C § 103

Claims 1, 2, 4, 5, 7, 8, 10, 11, 13 – 17, and 20 – 30 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Babler et al. The rejection is respectfully traversed for the following reasons.

Applicants' claimed process requires that the process be conducted without a continuous extraction step. Babler does not teach or suggest a process for preparing monoesters conducted without a continuous extraction step. For at least this reason, and the reasons presented in Applicants' communication filed on October 11, 2006, Applicants respectfully submit that the teaching of Babler fails to make obvious Applicants' claimed invention. Applicants therefore respectfully request that the rejection under 35 U.S.C. § 103(a) be withdrawn.

Concluding Remarks

In view of the above, it is submitted that the application is in condition for allowance. Reconsideration and allowance of the application is requested.

Respectfully submitted,

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Date

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